Sabaragamuwa Provincial Department of Education – Weekly School

Subject :- Mathematics

Week- 13 (2nd term)

Grade :- 8

Setting :- Embilipitiya Education Zone

(Learning Time :- 4 hours)

Time

21.1 Introduction.

- The earth we live on is a spherical object and land and ocean are located on its surface. As the Earth rotates around its axis of rotation, the exposed part of the sun receives sunlight, causing that part to have daylight and the rest to have night. Thus the times of two different places on the earth at the same time are different from each other.
- Describe the below given words by studying the pages 62 & 63.
    1. Northern hemisphere
    2. Southern hemisphere
    3. Equator
    4. Latitude
    5. Longitude

21.2 Latitudes & Longitudes

- Describe the below given words by studying the pages 64.
    1. Greenwich meridian line
    2. East longitude
    3. West longitude

- The time at any given moment is the same at any point on the same longitude. The difference in time between the Earth's west and east at 10 longitudes is 4 minutes, and the time it takes to rotate at 15 longitudes is 1 hour. The Earth is divided into 24 time zones of 150 longitudes each.

21.3 Local time

- At a point the time of Greenwich town is called as the Greenwich Mean Time-GMT. At a given point in a particular location, the time calculated based on the GMT according to the longitude of that location is called as the local time of that location.
- Study the page 65.

21.4 Standard time based on time zones

- It is considered that time of any location within the same time zone has the same time.

- Study pages 66,67 and 68 to understand time zones, how time changes when time zones change, international day line, how the day changes as you cross that line. Study pages 69,70,71,72 and complete exercise 21.1.